



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,782	02/28/2002	Carol L. Colrain	50277-1957(OID No. 2000-1)	8991
29989	7590	11/14/2005	EXAMINER	
HICKMAN PALERMO TRUONG & BECKER, LLP 2055 GATEWAY PLACE SUITE 550 SAN JOSE, CA 95110			DODDS, HAROLD E	
			ART UNIT	PAPER NUMBER
			2168	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,782	Applicant(s) COLRAIN ET AL.	
	Examiner Harold E. Dodds, Jr.	Art Unit 2168	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 45-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 45-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/1/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 August 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 45, 46, 48, 52-54, 56, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamache et al. (U.S. Patent No. 6,463,457) and Armentrout et al. (U.S. Patent No. 6,463,457).

4. Gamache renders obvious independent claims 45 and 53 by the following:
“...a service requestor using an IP address to address requests to a service provided by a first node within a cluster...” at col. 7, lines 30-35, col. 5, lines 37-43, and col. 9, lines 56-58.

“...wherein said first node is configured to provide said service to requests addressed to said IP address...” at col. 9, lines 56-64, col. 7, lines 30-35, and col. 5, lines 37-43.

“...in response to said first node becoming unavailable...” at col. 9, lines 56-58 and col. 20, lines 10-12.

“...automatically configuring a second node of the cluster...” at col. 9, lines 25-27, col. 9, lines 62-64, and col. 9, lines 2-4.

“...associated with said IP address...” at col. 5, lines 39-43.

“...after said first node becomes unavailable...” at col. 9, lines 56-58 and col. 20, lines 10-12.

“...the service requestor using said IP address...” at col. 7, lines 30-32 and col. 5, lines 39-43.

“...to address a message to said cluster related to said service...” at col. 7, lines 19-25, col. 5, lines 66-67, and col. 6, lines 1-2.

“...said second node of the cluster...” at col. 9, lines 2-4.

Gamache does not teach the use of responses requests and messages and the recognition of error conditions.

5. However, Armentrout teaches the responses requests and messages and the recognition of error conditions as follows:

“...to respond to requests...” at col. 22, lines 55-56.

“...and in response to said message...” at col. 23, lines 64-67.

“...sending a response that indicates an error condition...” at col. 17, lines 62-34 and col. 24, line 2.

It would have been obvious to one of ordinary skill at the time of the invention to combine Armentrout with Gamache to provide responses to requests and messages in order to use standard communication protocol between members of a network and to promote user acceptance of the system. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Armentrout with Gamache to detect error conditions in order to identify when a member of the network has an error condition and to permit appropriate action to be taken to correct the problem or take another corrective action and thus provide a more stable system. Gamache and Armentrout teach the use of related systems. They teach the use of computers, the use of databases, the use of networks, the use of nodes, the use of clusters, the use of services, the use of resources, the use of applications, the monitoring of status, the use of paths, and the detection of failures.

6. As per claims 46 and 54, the “...upon receiving said response...” is taught by Armentrout at col. 18, lines 21-23,

Art Unit: 2168

the "...service requestor identifying a second IP address to access said service..." is taught by Gamache at col. 7, lines 30-32 and col. 5, lines 37-43,

the "...and the service requestor using said second IP address..." is taught by Gamache at col. 7, lines 30-32 and col. 5, lines 39-43,

the "...to address a second message to said cluster related to said service..." is taught by Gamache at col., 7, lines 19-25, col. 5, lines 66-67, and col. 6, lines 1-2.

7. As per claims 48 and 56, the "...in response to said first node becoming unavailable..." is taught by Gamache at col. 9, lines 56-58 and col. 20, lines 10-12, the "...determining if said first node is configured..." is taught by Gamache at col. 9, lines 56-58 and col. 9, lines 62-64, and the "...to allow the service to be provided by another node of the cluster..." is taught by Gamache at col. 7, lines 16-19 and col. 9, lines 2-4.

8. As per claims 52 and 60, the "...wherein said first node comprises a monitor process..." is taught by Gamache at col. 9, lines 56-58 and col. 7, lines 45-48, the "...and wherein said monitor process is configured..." is taught by Gamache at col. 7, lines 45-48 and col. 9, lines 62-64, and the "...to detect if said first node becoming unavailable..." is taught by Gamache at col. 12, lines 28-31, col. 9, lines 56-61, and col. 20, lines 10-12.

9. Claims 47, 49-51, 55, and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gamache and Armentrout as applied to the claims above, and further in view of Dugan et al. (U.S. Patent No. 6,804,711).

As per claims 47 and 55, the "...storing, at the first node, information identifying one or more nodes of the cluster..." is taught by Gamache at col. 6, lines 33-37, col. 9, lines 56-58, col. 10, lines 3-6, and col. 5, lines 53-59, the "...may be instructed to provide the service..." is taught by Gamache at col. 3, lines 50-53 and col. 7, lines 16-19, and the "...if the first node becomes unavailable..." is taught by Gamache at col. 9, lines 56-58 and col. 20, lines 10-12, but the "...as being standby nodes..." and the "...wherein each of the one or more standby nodes..." are not taught by either Gamache or Armentrout.

However, Dugan teaches the use of standby nodes as follows:

"...At such time that there is a failure in the node cache database, or, when the hot cache 771a is currently unavailable to receive further updates, the system switches from the hot cache 771a to the standby cache 771b which then functions as a hot cache..." at col. 23, lines 56-60.

It would have been obvious to one of ordinary skill at the time of the invention to combine Dugan with Gamache and Armentrout to provide standby nodes in order to have nodes to switch to in the case of failure in the node cache and thus promote greater stability of the system. Likewise, it would have been obvious to one of ordinary skill at the time of the invention to combine Armentrout with Gamache to detect error conditions in order to identify when a member of the network has an error condition and to permit appropriate action to be taken to correct the problem or take another corrective action and thus provide a more stable system. Gamache and Armentrout

teach the use of related systems. They teach the use of computers, the use of databases, the use of networks, the use of nodes, the use of clusters, the use of services, the use of resources, the use of applications, the monitoring of status, the use of paths, and the detection of failures.

10. As per claims 49 and 57, the "...in response to determining said first node is configured...", is taught by Gamache at col. 9, lines 56-58 and col. 9, lines 16-19, the "...to allow the service to be provided by another node of the cluster...", is taught by Gamache at col. 7, lines 16-19 and col. 9, lines 2-4, the "...determining a standby node...", is taught by Dugan at col. 23, lines 56-60, the "...of the cluster to perform the service...", is taught by Gamache at col. 9, lines 2-4 and col. 7, lines 16-19, the "...and instructing the standby node...", is taught by Dugan at col. 5, lines 56-61 and col. 23, lines 56-60, and the "...to perform the service...", is taught by Gamache at col. 7, lines 16-19.

11. As per claims 50 and 58, the "...in response to said first node becoming unavailable...", is taught by Gamache at col. 9, lines 56-58 and col. 20, lines 10-12, the "...instructing a standby node...", is taught by dugan at col. 5, lines 56-61 and col. 23, lines 56-60, the "...of the cluster to perform the service...", is taught by Gamache at col. 9, lines 2-4 and col. 7, lines 16-19, the "...determining if the plurality of services...", is taught by Gamache at col. 7, lines 16-19,

the "...provided by the standby node...", is taught by Dugan at col. 23, lines 56-60,
the "...may be provided by another node of the cluster...", is taught by Gamache at col. 9, lines 2-4,
the "...and if the plurality of services...", is taught by Gamache at col. 7, lines 16-19,
the "...provided by the standby node...", is taught by Dugan at col. 23, lines 56-60,
the "...may not be provided by another node of the cluster...", is taught by Gamache at col. 8, lines 45-57 and col. 9, lines 2-4,
the "...configuring the standby node...", is taught by Dugan at col. 9, lines 17-21 and col. 23, lines 56-60,
the "...to disallow the plurality of services...", is taught by Gamache at col. 18, line 67, col. 19, lines 1-4, and col. 7, lines 16-19,
and the "...to be provided by another node of the cluster...", is taught by Gamache at col. 9, lines 2-4.

For claims 50 and 68, the terms "refuse" and "prevent" are used to suggest the terms "not provide" and "disallow", respectively.

12. As per claims 51 and 59, the "...in response to configuring the standby node...", is taught by Dugan at col. 9, lines 17-20 and col. 23, lines 56-60,
the "...to disallow the plurality of services...", is taught by Gamache at col. 18, line 67, col. 19, lines 1-4, and col. 7, lines 16-19,
the "...to be provided by another node of the cluster...", is taught by Gamache at col. 9, lines 2-4,
and the "...issuing an alert to a user...", is taught by Armentrout at col. 24, lines 37-38.

Response to Arguments

13. Applicants' arguments filed 19 August 2005 have been fully considered but they are not persuasive. For the first argument for independent claims 45 and 53 on page 8, paragraph 4 the Applicants state:

"However, the Office Action does not support the obviousness rejections in that manner. Rather, to support the obviousness rejections, not only has each claim been divided into its constituent elements, but also each constituent element of the claim has been finely dissected into a set of short phrases and sentence fragments. The Office Actions then point out how each individual fragment corresponds to a similar fragment in a cited reference. The fragment-to-prior-art correlation appears to have been made without any consideration as to the relationship between the fragments, the meaning of the elements as a whole, and the meaning of the claim as a whole."

The Examiner disagrees. The Gamache reference teaches an application, which is quite close to the proposed invention. Gamache already is sending out requests to perform some action. This suggests the Armentrout application, which also sends out requests and then follows through with responses to these requests.

14. For the second argument for independent claims 45 and 53 on page 9, paragraph 1 the Applicants state:

"In view of the fundamental differences between the teachings of the cited references and the requirements of Claim 45, numerous elements of Claim 45 are not disclosed, taught, or suggested by the cited art. To illustrate, Claim 45 features the element of "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests addressed to said IP address." With respect to this element, the Office Action states that:

► "in response to said first node becoming unavailable" is shown by Gamache at Col. 9, lines 56-58 and Col. 20, lines 10-12, which states, in toto:

To create a new cluster, a system administrator runs a cluster installation utility on a system (node) that then becomes a first member of the cluster 59For example, three replica members may be available for ordinary reliability, in which two disks will have to fail to render the cluster unavailable.

► "automatically configuring a second node of the cluster" is shown by Gamache at Col. 9, lines 25-27, Col. 9, lines 62-64, and Col. 9, lines 2-4, which states, in toto:

Art Unit: 2168

To automatically failback, groups require a defined preferred owner ...The administrator then configures any resources that are to be managed by the cluster software, possibly including other storage devices...If the failover manager 80 takes the resource offline, the group is restarted on another node in the cluster 59, known as pushing the group to another node.

► "to respond to requests" is shown by Armentrout at Col. 22, 55-56, which states, in toto:

Requests the status of a particular task. The server will send a TaskStatus message in response.

► "addressed to said IP address" is shown by Gamache at Col. 5, lines 39-43, which states, in toto:

For example, a group may include an application that depends on a network name, which in turn depends on an Internet Protocol (IP) address, all of which of collected in a single group."

The Examiner disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). For the first part of this limitation, the "To create a new cluster, a system administrator runs a cluster installation utility on a system (node) that then becomes a first member of the cluster 59" shows a response to a condition and the "For example, three replica members may be available for ordinary reliability, in which two disks will have to fail to render the cluster unavailable" shows a condition where the cluster, hence the nodes in a cluster become unavailable. This combination of references contains a condition and a response. For the second part of this limitation, the "To automatically failback, groups require a defined preferred owner" demonstrated that the Gamache application performs some actions automatically, the "The administrator then configures any resources that are to be managed by the cluster software, possibly including other storage devices" teaches the configuring of resources

managed by the cluster, and the "If the failover manager 80 takes the resource offline, the group is restarted on another node in the cluster 59, known as pushing the group to another node" confirms that nodes are among the resources managed by the cluster. For the third part of this limitation the "Requests the status of a particular task. The server will send a TaskStatus message in response" is taught by the Armentrout application, which also sends out requests and then follows through with responses to these requests. Finally, for the fourth part of this limitation the "For example, a group may include an application that depends on a network name, which in turn depends on an Internet Protocol (IP) address, all of which of collected in a single group" shows that a group or cluster may depend on an IP address. These elements are clearly related to one another.

15. For the third argument for independent claims 45 and 53 on page 9, paragraph 2, page 10, and page 11, paragraph 1 the Applicants state:

"The above portions of the cited references may discuss words or phrases of this element, but the cited portions have no relation to each other, and collectively they fail to disclose, teach, or suggest this element in its entirety. Specifically, Gamache fails to disclose, teach, or suggest the element of "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests addressed to said 1P address" because, inter alia:

(1) The Office Action acknowledges that Gamache "does not teach the use of responses requests and messages and the recognition of error conditions."

(2) The portion of Gamache cited to show "in response to said first node becoming unavailable" does not disclose, teach, or suggest automatically configuring a second node of a cluster to respond to requests addressed to the TP address, where a first node is configured to provide the service to requests address to the 1P address. Moreover, while this portion mentions that a cluster may become unavailable, there is nothing in the cited portion of Gamache that suggests a node of the cluster becoming unavailable; consequently, this cited portion of Gamache fails to show the claim fragment of "in response to said first node becoming unavailable," let alone the element of "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests associated with said IP address."

Art Unit: 2168

(3) The portion of Gamache cited to show "automatically configuring a second node of the cluster" does not disclose, teach, or suggest the features of "in response to said first node becoming unavailable, automatically configuring a second node of a cluster to respond to requests addressed to the IP address used by a service requestor to access a service provided by the first node." Thus, the actions performed in these cited portions are not performed in response to a first node, as claimed, becoming unavailable:

(4) The portion of Gamache cited to show "addressed to said EP address" does not disclosure, teach, or suggest automatically configuring a second node of a cluster to respond to requests addressed to an IP address, used by a service requestor to address requests to a service provided by the first node, in response to said first node becoming unavailable. Instead, this cited portion discusses that an application may depend on a network name, which may depend on an IP address. However, this teaching lacks a suggestion of (a) performing any action in response to said first node, as claimed, becoming unavailable, and (b) automatically configuring a second node of a cluster to respond to requests addressed to the 1P address as claimed."

The Examiner disagrees. In the first portion of this argument the Applicants state that the Gamache reference does not teach all of the elements of the proposed invention.

This is an obviousness rejection and Armentrout teaches the use of responses to requests and messages and the recognition of error conditions. The second portion of the third argument is a restatement of a portion of the second argument. Therefore, the response to the second argument is appropriate as a response to the second portion of the third argument. The third portion of the third argument like the second portion was covered in the response to the second argument. Therefore, the response to the second argument is appropriate as a response to the third portion of the third argument. Finally, the fourth portion of the third argument was also covered in the response to the second argument. Therefore, the response to the second argument is appropriate as a response to the fourth portion of the third argument.

16. For the fourth argument for independent claims 45 and 53 on page 11, paragraph 2 the Applicants state:

Art Unit: 2168

"Similarly, Armentrout is only cited to show "to respond to requests." Armentrout does not contain any portion that suggests, "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests addressed to said IP address." Instead, Armentrout discusses responding to a request in an entirely different context. However, a server that sends the TaskStatus message of Armentrout does not have anything to do with this claimed element."

The Examiner disagrees. Armentrout does not have to teach these elements. This is an obviousness rejection and Gamache teaches these elements.

17. For the fifth argument for independent claims 45 and 53 on page 11, paragraph 3 the Applicants state:

"Importantly, if one were to combine the teachings of Gamache and Armentrout, the resulting combination would not look anything like the features of Claim 45. Specifically, since no portion of Gamache or Armentrout performs the step of "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests addressed to said EP address," a combination of Gamache or Armentrout would correspondingly not perform the step of "in response to said first node becoming unavailable, automatically configuring a second node of the cluster to respond to requests addressed to said IP address." The mere fact that certain portions of Gamache or Armentrout use words or phrases that are featured in this element is not, in and of itself, enough for Gamache or Armentrout to discuss or suggest the subject matter of this element when read in its entirety."

The Examiner disagrees. In response to applicant's argument that "if one were to combine the teachings of Gamache and Armentrout, the resulting combination would not look anything like the features of Claim 45", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure and features are capable of performing the intended use, then it meets the claim. The remainder of this argument has been addressed in the response to the second argument.

18. For the sixth argument for independent claims 45 and 53 on page 11, paragraph 4 and page 12, paragraph 1 the Applicants state:

"Claim 45 also features the element of "after said first node becomes unavailable the service requestor using said IP address to address a message to said cluster related to said service." Neither Gamache nor Armentrout suggest the performance of this element. The Office Action cites numerous portions of Gamache, which are completely unrelated to each other, to show the subject matter of this element."

The Examiner disagrees. In this limitation the Applicants have substituted the phrase "address a message" for "send a message". This changes the meaning of the limitation and suggests performing an action based on the message. Gamache teaches this amended limitation at col. 9, lines 56-58 and col. 20, lines 10-12, at col. 7, lines 30-32 and col. 5, lines 39-43, and at col., 7, lines 19-25, col. 5, lines 66-67, and col. 6, lines 1-2. The response to the second argument had shown the relationships of the teachings of Gamache for the most of the elements of the recited prior art. Gamache teaches the two new elements as follows:

"...The global update protocol (GLUP) is used by the global update manager 90 to broadcast updates to each node 60_1-60_n in the cluster 59. GLUP generally comprises a standard global update **message format**, state information maintained in each node, and a set of rules that specify how global update should be processed and what steps should be taken when failures occur..." At col. 7, lines 19-25.

"...Through the communications manager 72, the **cluster service** 66 is essentially in constant communication with the other nodes 60_1-60_n of the cluster 59..." at col. 5, lines 66-67 and col. 6, lines 1-3.

The GLUP broadcasts messages and action is taken based on these messages. The phrase "address a message" suggests that some action is taken based on the message. This action is not defined in independent claims 45 and 53. Inclusion of the

Art Unit: 2168

action taken in the independent claims might make these independent claims allowable.

Any claim of the action taken should be supported by a reference to the Specification indicating where this action is mentioned.

19. For the seventh argument for independent claims 45 and 53 on page 12, paragraph 3 and page 13, paragraphs 1 and 2 the Applicants state:

"Claim 45 also features the element of "in response to said message, said second node of the cluster sending a response that indicates an error condition." Neither Gamache nor Armentrout suggest the performance of this element. The Office Action acknowledges that Gamache "does not teach the user of responses requests and messages and the recognition of error conditions." Despite this acknowledgement of the shortcoming; of Gamache's teachings, the Office Action relies upon Gamache to show the fragment of "said second node of the cluster," and relies upon Armentrout (Col. 23, lines 64-67, Col. 17, lines 62-64, and Col. 24, line 2) to show the remainder of this element. However, the cited portions of Armentrout lack (a) any suggestion that the second node of the cluster, as claimed, is performing any actions, and (b) any suggestion of sending a response that indicates an error condition in response to a message sent to the cluster by the service requestor."

The Examiner disagrees. This limitation is taught by a combination of Gamache and Armentrout under the obviousness rejection. Armentrout teaches "and in response to said message" at col. 23, lines 64-67 and "sending a response that indicates an error condition" at col. 17, lines 62-34 and col. 24, line 2 and Gamache teaches "said second node of the cluster" at col. 9, lines 2-4. The Applicants err when they suggest that Armentrout does not teach the use of nodes with clusters. In fact, Armentrout associates clusters with nodes as follows:

"...In operation, the present invention allows the client to specify job and task parameters via the client interface. Using the client interface, the Client selects desired attributes of nodes in a virtual cluster..." at col. 13, lines 4-7.

Art Unit: 2168

If this Armentrout citation were substituted for the Gamache citing for this limitation, the prior art rendering obvious this limitation would consist entirely of Armentrout citations.

20. For the eighth argument for independent claims 45 and 53 on page 14, paragraph 4 the Applicants state:

"Neither Gamache nor Armentrout show any suggestion, teaching, or motivation to combine their teachings, nor does the Office Action provide a "clear and particular" showing of the suggestion, teaching, or motivation to combine their teachings. Both Gamache and Armentrout are directed towards drastically different subject matter, namely providing consistent cluster operation data and utilizing idle computational processing power. The Office Actions unsupported assertion that the references both use "resources," "nodes," "computers," "databases," "networks," "clusters," "services," "applications," "monitoring of status," "paths," and "the detection of failures" does not provide a motivation for combination, as these features are so common, any reference may be said to be combined with another reference in this fashion based on a key word search of nouns which both references recite therein, irrespective of the teachings of the references. The assertion also directly contradicts the Office Actions earlier statement that "Gamache does not teach ...the recognition of error conditions.""

The Examiner disagrees. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The office action states that it would have been obvious to one of ordinary skill at the time of the invention to combine Armentrout with Gamache to provide responses to requests and messages in order to use standard communication protocol between members of a network and to promote user acceptance of the system. Likewise, it

would have been obvious to one of ordinary skill at the time of the invention to combine Armentrout with Gamache to detect error conditions in order to identify when a member of the network has an error condition and to permit appropriate action to be taken to correct the problem or take another corrective action and thus provide a more stable system. Gamache already is sending out requests to perform some action. This suggests the response feature of the Armentrout application, which also sends out requests and then follows through with responses to these requests. Likewise, Gamache is detecting failures, but is not explicitly identifying these failures as error conditions. The recognition of failures by Gamache suggests the recognition of error conditions by Armentrout.

21. For the ninth argument for independent claim 53 on page 15, paragraph 3 the Applicants state:

“Claim 53 recites features similar to those recited in Claim 45, except that Claim 53 is recited in machine-readable medium form. Consequently, Claim 53 is patentable over the cited art and is in condition for allowance for at least the reasons given above with respect to Claim 45.”

The Examiner disagrees. The responses to the first eight arguments apply equally to independent claim 45 and independent claim 53. For this reason these responses show that independent claim 53 is still rendered obvious.

22. For the tenth argument for claims 46-52 and 54-60 on page 15, paragraph 4 the Applicants state:

“Claims 46-52 and 54-60 are dependent claims, each of which depends (directly or indirectly) on one of the claims discussed above. Each of Claims 46-52 and 54-60 is therefore allowable for the reasons given above for the claim on which it depends. In addition, each of Claims 46-52 and 54-60 introduces one or more additional limitations that independently render it patentable. However, due to the fundamental differences

Art Unit: 2168

already identified, to expedite the positive resolution of this case a separate discussion of those limitations is not included at this time, although the Applicants reserve the right to further point out the differences between the cited art and the novel features recited in the dependent claims."

The Examiner disagrees. Since the first nine argument have shown that independent claims 45 and 53 are still rendered obvious, claims 46-52 depend on independent claim 45, claims 54-60 depend on independent claim 53, and no additional arguments have been provided for any of claims 46-52 and 54-60 then claims 46-52 and 54-60 are still rendered obvious.

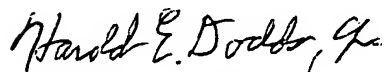
Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold E. Dodds, Jr. whose telephone number is (571)-272-4110. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571)-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2168

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harold E. Dodds, Jr.
Patent Examiner
November 8, 2005



GRETIA ROBINSON
PRIMARY EXAMINER